

Message

---

**From:** Ex. 6 Personal Privacy (PP)  
**Sent:** 6/8/2017 2:22:33 PM  
**To:** Shea, Valois [Shea.Valois@epa.gov]  
**Subject:** Re: Question on Dewey-Burdock Project

Valois --

I'll let a few people who I know are working on comments know.

Safe travels.

Ex. 6 Personal Privacy (PP)

On Wed, Jun 7, 2017 at 5:16 PM, Shea, Valois <Shea.Valois@epa.gov> wrote:

You're welcome. I actually started the well counting process early on, but realized before I actually did the math that for the purposes of my analysis I needed to take the approach I described earlier rather than count the number of wells active at one time.

I wanted to let you know that I will be on leave beginning on Wednesday, June 14. (I'm driving back home to TN for Father's Day.) I won't have access to email regularly to continue answering questions. I will try to keep checking email periodically during that time. I want to try to be available to answer questions up to the end of the comment period. Perhaps you could spread the word about that?

Thanks!

*Valois*

---

Valois Shea  
U.S. EPA Region 8  
MailCode: 8WP-SUI  
1595 Wynkoop Street  
Denver, CO 80202-1129  
Phone: (303) 312-6276  
Fax: (303) 312-6741  
Email: [shea.valois@epa.gov](mailto:shea.valois@epa.gov)

**From:** Ex. 6 Personal Privacy (PP)  
**Sent:** Wednesday, June 07, 2017 1:30 PM

**To:** Shea, Valois <Shea.Valois@epa.gov>  
**Subject:** Re: Question on Dewey-Burdock Project

Thanks for taking the time to pull this together, Valois. I'll look this over.



On Wed, Jun 7, 2017 at 1:22 PM, Shea, Valois <Shea.Valois@epa.gov> wrote:

I don't know the number of injection wells that would be in operation at the same time either. When I was analyzing the situation I was concerned more about the overall water budget (Section 9.3 Anticipated Injection Flow Rate and Volume in the Class III fact sheet) and impacts of groundwater consumption and impacts on the Inyan Kara potentiometric surface (3.1 Potential Groundwater Consumption & 3.2 Potential Drawdown of Aquifer Potentiometric Surfaces in the draft cumulative effects analysis).

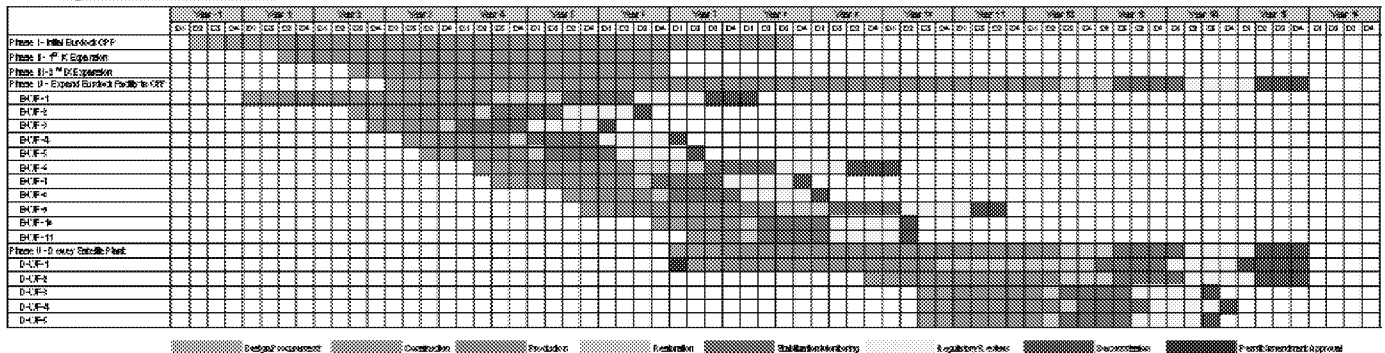
A rough estimate can be calculated based on the info in the paragraph top of p. 94 (Class III fact sheet) of how many wellfields will be operating at one time...

Powertech estimates that the injection flow rates for individual Class III injection wells will range from approximately 5 to 30 gallons per minute (gpm). The project-wide injection flow rate will fluctuate depending on the number of wellfields undergoing uranium recovery and groundwater restoration. The project-wide injection flow rate is expected to increase from the onset of uranium recovery in the first wellfield through the period of concurrent uranium recovery and groundwater restoration. Powertech expects that individual wellfield uranium recovery times will be about 2 years. At a minimum, one wellfield in the Burdock Area and one wellfield in the Dewey Area will be in the uranium recovery phase at the same time. More than one wellfield in each area may be in the uranium recovery phase at any given time, if the Central Processing Plant or Satellite Plant have the treatment capacity. Groundwater restoration will be completed following uranium recovery in each wellfield. Therefore, concurrent uranium recovery and groundwater restoration is anticipated to begin approximately 2 years after initial wellfield operation. Permit Application Figure 10.2 depicts the anticipated project schedule.

...and looking at the proposed wellfield development schedule (Fig 1.3 Life of Mine Schedule) in the most recent Technical Report/Preliminary Economic Assessment

[http://azargauranium.com/wp-content/uploads/report/technical/Dewey-Burdock-43-101\\_PEA\\_April-Update\\_Final-21.pdf](http://azargauranium.com/wp-content/uploads/report/technical/Dewey-Burdock-43-101_PEA_April-Update_Final-21.pdf)

Figure 1.3: Life of Mine Schedule



Note:  
 1) All CIP activities are scheduled to begin in Year 1, with the exception of the 3rd expansion which begins in Year 2.  
 2) All CIP activities are based on a schedule of activities required to meet production for the given year. Thus, the end of the schedule is based on the need of the mine to produce in the year of construction activities.  
 3) Phase I construction activities are scheduled to begin in Year 1.  
 4) All wellfield construction activities are to be completed during the year of construction activities.

...and looking at the number of wells in Dewey wellfield 1 shown in slide 5 of my public hearing presentation (attached). I also included slide 6 which shows all the wellfields. Based on the estimated density of the wellfield patterns and the size of the ore zone in each proposed wellfield you can get a rough number.

I hope this helps at least a little.

If you feel comfortable contacting John Mays or Lisa Scheinost at the Denver office, they may be able to give you a more exact number. I have their email addresses:

[jmays@powertechuranium.com](mailto:jmays@powertechuranium.com) or [lscheinost@powertechuranium.com](mailto:lscheinost@powertechuranium.com)

Valois

Valois Shea  
 U.S. EPA Region 8  
 MailCode: 8WP-SUI  
 1595 Wynkoop Street  
 Denver, CO 80202-1129  
 Phone: (303) 312-6276  
 Fax: (303) 312-6741  
 Email: [shea.valois@epa.gov](mailto:shea.valois@epa.gov)

From: Ex. 6 Personal Privacy (PP)  
 Sent: Wednesday, June 07, 2017 12:31 PM  
 To: Shea, Valois <[Shea.Valois@epa.gov](mailto:Shea.Valois@epa.gov)>  
 Subject: Re: Question on Dewey-Burdock Project

Hi --

Do you know how many wells will be operational at one time? That would probably answer the question, too.

Thanks --

Ex. 6 Personal Privacy (PP)

On Wed, Jun 7, 2017 at 12:21 PM, Shea, Valois <[Shea.Valois@epa.gov](mailto:Shea.Valois@epa.gov)> wrote:

Hi Ex. 6 Personal Privacy (PP)

I don't have information on the number of header houses that would be operating at a given time. The only information I have related to that is that "Powertech anticipates that 20 production and 80 injection wells will be connected to a header house." – the last sentence on p. 77 of the Class III permit fact sheet.

*Valois*

---

Valois Shea  
U.S. EPA Region 8  
MailCode: 8WP-SUI  
1595 Wynkoop Street  
Denver, CO 80202-1129  
Phone: (303) 312-6276  
Fax: (303) 312-6741  
Email: [shea.valois@epa.gov](mailto:shea.valois@epa.gov)

**From:** Ex. 6 Personal Privacy (PP)

**Sent:** Wednesday, June 07, 2017 12:15 PM

**To:** Shea, Valois <[Shea.Valois@epa.gov](mailto:Shea.Valois@epa.gov)>

**Subject:** Question on Dewey-Burdock Project

Hi, Valois --

I can't find this information and would appreciate either an answer or a citation that helps me find it in one of the project documents. How many header houses will be operating at one time?

That's it for now. I may have other questions as I finish reading the project documents.

Thanks --

Ex. 6 Personal Privacy (PP)